

PUB-NO: WO008202955A1

DOCUMENT-IDENTIFIER: WO 8202955 A1

TITLE: IMPROVED DIFFRACTION GRATING SCANNER  
CORRECTION OF SCAN CURVATURES----- KWIC -----  
■

## Abstract Text - FPAR (1):

CHG DATE=19990617 STATUS=0>An improved diffraction grating anamorphic imaging techniques are utilized to correct the curve scan, in the plane of the scan, as well as correction for field curvature to provide improved resolution and increased length of scan. The scanner system may comprise either refractive or reflective elements, cylindrical lenses (13, 15, 36, 38) and reflectors (27, 33, 37, 39) or elliptical cross-section and toroidal reflectors (20) and lenses. In addition, such system will customarily include one or more spherical elements, but at least one cylindrical or toroidal element must be present. The anamorphic imaging correction apparatus can be utilized with various scanners, including polygonal and single-mirror scanners, as well as with various types of light sources.

Details Text Image HTML KWIC

109 EP 553729 A1

110 FR 2556484 A1

111 WO 8202955 A1

112 EP 772156 A

Documentation Searched other than Minimum Documentation  
to the extent that such Documents are included in the Fields Searched \*ITEMS CONSIDERED TO BE RELEVANT<sup>14</sup>Citation of Document, <sup>15</sup> with indication, where appropriate, of the relevant passages <sup>17</sup>

P, A, 55-135813, Published 23 October 1980

P, A, 55-157717, Published 08 December 1980

S, A, 4,294,506, Published 13 October 1981

S, A, 3,870,394, Published 11 March 1975

S, A, 3,750,189, Published 31 July 1973

N, IBM Journal of R and D, Vol. 21, No. 5,  
1977, U.S.A., J.M. Fleischer et al, "Laser  
-Optical System of the IBM 3800 Printer,"  
see pages 479-482

S, A, 4,274,703, Published 23 June 1981

Series of cited documents:<sup>18</sup>

defining the general state of the art  
document but published on or after the international

"P" document published prior to the international  
on or after the priority date claimed

**DERWENT-ACC-NO:** 1994-345882

**DERWENT-WEEK:** 199443

**COPYRIGHT 1999 DERWENT INFORMATION LTD**

**TITLE:** High resolution camera having reduced power consumption  
corresp.to HDTV standard - has anamorphic lens imaging  
light from object, which is supplied through R, G and B  
CCDs of which outputs are combined in dichroic prism, and  
changes pixel ratio by adjusting anamorphic lens  
NoAbstract

----- KWIC -----

**Derwent Accession Number - NRAN (1):**  
1994-345882

**Title - TIX (1):**  
High resolution camera having reduced power consumption corresp.to HDTV

Details Text Image HTML KWIC

116 US 5414458 A

117 IL 94135 A

118 JP 06268900 A

119 JP 06253242 A

**108 EP 748694 A2**

108 EP 748694 A2

glass plate 62. The laser diode assembly produces an optically fanned light plane using optics of the type described in U.S. Pat. No. 4,645,348. Positioned within cabinet 52 adjacent the imaging window is a base leg mirror 64. The mirror is positioned so that light entering through the imaging window enters an anamorphic lens 66. The anamorphic lens has a first focal length along one axis and a different focal length along a second orthogonal axis. The anamorphic lens thus produces expanded resolution in one plane and compressed resolution in another plane. This gives one magnification along the axis orthogonal to the length of the contour line and different magnification along the axis parallel to the length of the contour line. By positioning the anamorphic lens properly, the plane of greater focal length and thus higher magnification is aligned generally perpendicular to the length of the imaged contour line. Positioned behind the anamorphic lens is an imaging lens 68 which projects through an interference filter 70 into the video camera assembly 72. Also housed within cabinet 52 are the interface electronics 74 which couple between the video camera assembly and the digital computer equipment yet to be discussed. The above-described optical arrangement provides a suitable field in both the y and z directions, while maintaining sufficient resolution to compensate for the wide variation in vehicle track, wheel size and tire section.

Patent Number: 4,745,469  
Date of Patent: May 17, 1988

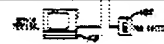
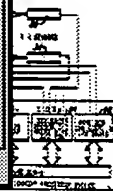
RELEVANT PATENT DOCUMENTS:  
A1/16 Pat. Rep. of Germany ... 124/111  
OTHER PUBLICATIONS

of the First International Video Conference on Graphics, Washington, D.C., Oct. 30-Nov. 1, 1987, published in Computer Vision & Graphics Tech., J. T. O'Sullivan et al., pp. 50-53.

inventor: Edward W. Stearns  
attorney: John H. Harwood, Henry & Paine

**ABSTRACT**  
Images are projected on structured light while the wheel is rotated, so that the image is stored in the surface of the tire. The images are read by video cameras positioned at the optical plane of the structured light. The images are then processed by a computer to determine the speed of the wheel. Analytically, expansion ratios are used to control the size of the images which are read by the video cameras and processing. The data is processed by a digital computer system which is controlled by a sequencer circuit.

87 Claims, 13 Drawing Sheets



Details Text Image HTML KWIC

82 US 4827436 A

83 US 4820911 A

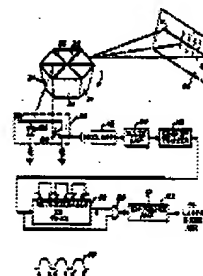
84 US 4745469 A

85 US 4705401 A

84	US 4745469 A
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[illegible]

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**48. Colson, 11 December 1969**

US-PAT-NO: 5528704

DOCUMENT-IDENTIFIER: US 5528704 A

TITLE: Image resolution conversion using a plurality of registrations

----- KWIC -----

## Detailed Description Text - DETX (8):

Subsequent to processing input image R.sub.in using prefilter image R'.sub.in output from prefilter 28 or input image R.sub.in, controller 26 elected not to prefilter input image R.sub.in, is processed by resolution converter 30 based on an input and output tile size of conversion controller 26. In the preferred embodiment area map resolution converter 30 to generate appropriate resolution (MxN) image Rout. Although resolution conversion is described here in mapping, it is understood that other linear combination techniques are used, such as nearest neighbor methods as disclosed in U.S. Patent entitled "Unquantized Resolution Conversion of Bitmap Images".

Details Text Image HTML KWIC

59 US 5579064 A

60 US 5570232 A

61 US 5528704 A

62 US 5491346 A

U.S. Patent

Jan. 18, 1996

Sheet 3 of 9

5,528,704

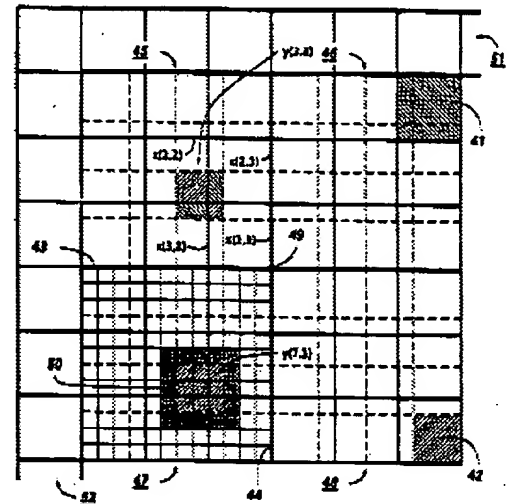


FIG. 3

US-PAT-NO: 4554585

DOCUMENT-IDENTIFIER: US 4554585 A

TITLE: **Spatial prefilter for variable-resolution sample  
imaging systems**

----- KWIC -----

US Patent No. - PN (1):  
4554585

Details Text Image HTML KWIC

2 US 4467361 A

## United States Patent

Patent Number: **4,554,585**

Class

Date of Patent: Nov. 15, 1983

[52] SPATIAL PREFILTER FOR  
VARIABLE-RESOLUTION SAMPLED  
IMAGING SYSTEMS4,554,585 1/1/83 1/1/83 1/1/83  
4,554,585 1/1/83 1/1/83 1/1/83

[72] Inventor: Curtis S. Corbin, Princeton, N.J.

Primary Examiner—Glen Z. Robinson

[73] Assignee: RCA Corporation, Princeton, N.J.

Assistant Examiner—Stephen R. Smith

[21] Appl. No. 823,887

Attorney, Agent or Firm—Young &amp; Tropea; George R.

Elliott, George J. Salsgiver

[22] Filed: Aug. 12, 1982

[37]

[51] Int. Cl. H01N 1/00

[52] U.S. Cl. 358/211, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

References Cited

U.S. PATENT DOCUMENTS

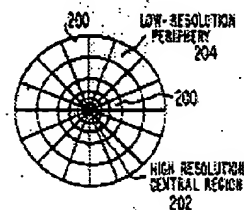
4,554,585 1/1/83 1/1/83 1/1/83

4,554,585 1/1/83 1/1/83 1/1/83

[57] ABSTRACT

Abstract: A spatial prefilter for variable-resolution sampled imaging systems is described. The prefilter is a circular device having a central region of high resolution and a peripheral region of low resolution. The prefilter is used to filter the light from the sample before it is imaged by the imaging system. The prefilter is designed to pass the light from the central region of the sample and to block the light from the peripheral region of the sample. This results in a high-resolution image of the central region and a low-resolution image of the peripheral region. The prefilter is made of a material that is transparent to the light from the central region and opaque to the light from the peripheral region. The prefilter is mounted in the light path between the sample and the imaging system.

4 Claims, 4 Drawing Figures





US-PAT-NO: 5303373

DOCUMENT-IDENTIFIER: US 5303373 A

TITLE: Anamorphic fused fiber optic bundle

----- KWIC -----

## Brief Summary Text - BSTX (17):

The anamorphic optical fibers of this invention can be used to conventional imaging devices in the same fashion as prior art devices have been utilized, with the advantages, of course, attendant to this such as maximization of resolution, achievement of proper magnification, effective use of active areas, etc.

## United States Patent

Harootian, Jr.

 5,303,373  
 Date of Patent Apr. 12, 1994

ANAMORPHIC FUSED FIBER OPTIC BUNDLE

Inventor: Haruti G. Harootian, Jr., Worcester, Mass.

Assignee: Haruti Fiber Optics, Inc., Scituate, Mass.

Attorney: No. 390

Filed: Oct. 25, 1993

Int. Cl. G02B 23/00

U.S. Cl. 359/214, 359/215, 359/216

Field of Search 359/214, 359/215, 359/216

References Cited

U.S. PATENT DOCUMENTS

3,101,715	4/1989	Kasay	359/214
3,204,256	5/1984	Overholt	359/214
4,004,900	12/1991	Najma et al.	359/214
4,054,763	4/1978	Chen	359/214
4,073,866	1/1978	Smith	359/214
4,228,683	1/1979	Ben	359/214
4,274,873	1/1979	Ben	359/214
4,283,553	1/1979	Ben	359/214
4,283,553	1/1979	Ben	359/214
4,283,553	1/1979	Ben	359/214
4,283,553	1/1979	Ben	359/214

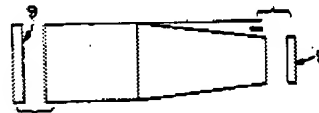
4,811,833	1/1990	Robert	359/214
4,822,028	1/1990	Overholt	359/214
4,811,833	1/1990	Robert	359/214
4,822,028	1/1990	Overholt	359/214
4,811,833	1/1990	Robert	359/214
4,822,028	1/1990	Overholt	359/214

 Primary Examiner—John C. Lee  
 Attorney—Haruti Fiber Optics, Inc., Worcester, Mass.  
 Attorney—Haruti Fiber Optics, Inc., Worcester, Mass.

ABSTRACT

An anamorphic, tapered bundle fiber optic bundle is provided having a longitudinal axis Z and two ends each having surfaces in a plane (X and Y) and a periphery in a plane (Z and X) and a periphery in a plane (Z and Y). The bundle is tapered along the Z axis from the value X at one end to the value Y at the other end.

34 Claims, 1 Drawing Sheet



Details Text Image HTML KWIC

69 US 5359423 A

70 US 5309241 A

71 US 5303373 A

72 US 5274489 A

63 US 5440111 A

...transformation solves the above problems by  
an appropriate loss system for use in a bank-to-bank

Typically, a cinematograph produces an interlaced video signal having two separate fields. Each field consists of alternating two row scanning, with the rows of plants in each field aligned in the horizontal direction. Therefore, when viewing the CMTS in terms of accurate resolution, each field can be considered to be represented by every other line.

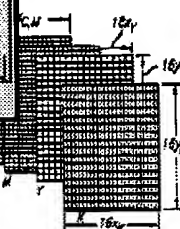
- 1) One way to increase the horizontal displacement is to use a progressive scanning system which enables the various structures and elements within the horizontal and vertical object sets. These elements are very expensive and sometimes only available in prototype form. There is a need for a responsive system which can adapt a typical commercial CCD to accommodate the needed horizontal image size. A section for the discrepancy between horizontal and vertical image size.

### ELIMINARY OF THE INVENTION



value is automatically selected when the number of output pixels is more than twice the number of input pixels. The sharpening-factor value, ideally two, is multiplied by the deviation of each image element, e. g. pixel, from the average of its adjacent neighbors; this product is added to the level of the subject image element to form an adjusted level. Weighting or selection of neighbor values along particular axes allows for anisotropic resolution or anamorphic scaling.

of 9 5,768,482



Details Text Image HTML KWIC

44 US 5804809 A

45 US 5786581 A

46 US 5768482 A

47 US 5750976 A

US-PAT-NO: 5936755

DOCUMENT-IDENTIFIER: US 5936755 A

\*\*See image for Certificate of Correction\*\*

TITLE: Multi-beam scanning apparatus

----- KWIC -----

## Brief Summary Text - BSTX (7):

In the multi-beam scanning apparatus disclosed in Japanese Application No. 58-68016, resolution is switched by providing a change the advance direction of the luminous flux in an optical laser beams are overlaid, and changing the beam spacing in a scan on a scanned surface via said components. In the multi-beam scanning apparatus disclosed in Japanese Laid-Open Patent Application No. 57-549, resolution is switched by providing an afocal anamorphic zoom lens system forming magnification in a subscan direction, and changing the beam spacing in a subscan direction on a scanned surface via said zoom lens system.

Details Text Image HTML KWIC

38 US 5975703 A

39 US 5956355 A

40 US 5936755 A

41 US 5818645 A

U.S. Patent

Aug. 10, 1999

Sheet 3 of 3

5,936,755

FIG. 8(A)

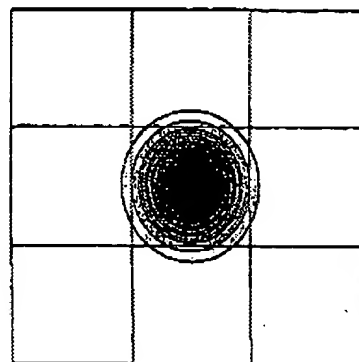
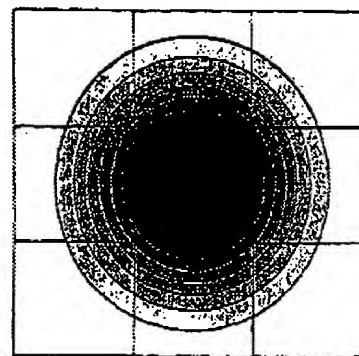


FIG. 8(B)



US-PAT-NO: 6181482

DOCUMENT-IDENTIFIER: US 6181482 B1

TITLE: Variable ratio anamorphic lens

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## Brief Summary Text - BSTX (11):

The use of anamorphic optics to provide a variety of display aspect ratios is particularly beneficial for systems based on emerging digital display technologies because all available resolution of the recording and display media can be utilized. Further, some digital media use ratios other than academy ratio. For example, media with a 1280 by 1024 element resolution has a ratio of 1.25. Without anamorphic optics, a 4:3 ratio image could use only 963 elements vertically, while a 1.85:1 flat widescreen image would use only 692 vertical elements. By using anamorphic optics with an anamorphic ratio of about 1.07:1, a 4:3 ratio image can utilize the full 1024 element vertical resolution.

Details Text Image HTML KWIC

30 US 6243156 B1

31 US 6213606 B1

32 US 6181482 B1

33 US 6160826 A

amplification horizontally and vertically to produce the appropriate display aspect ratio. It should be noted that, while it is convenient to speak in terms of compressing when recording and expanding when reproducing along one axis, the same result can be achieved by compressing when recording along one axis and compressing when reproducing along the perpendicular axis. It is also possible to use expansion in both processes rather than compression. Thus, the recording and/or often have a two-fold anamorphic ratio to the reproducing lens with the anamorphic effect of both applied three's ratio axis or both lenses can have the same anamorphic ratio applied along perpendicular axes.

Anamorphic systems produce presentations of a high quality for the geometry for the anamorphic anamorphic

one the part of the system. Anamorphic lens generally provide only a single ratio of anamorphic. Therefore, a different anamorphic lens must be provided the appropriate anamorphic ratio for that it is to be presented with an anamorphic

of anamorphic optics to provide a variety of aspect ratios is particularly beneficial for systems using digital display technologies because all resolution of the recording and display media can be utilized. Further, some digital media use ratios other than academy ratio. For example, media with a 1280 by 1024 element resolution has a ratio of 1.25. Without anamorphic optics, a 4:3 ratio image could use only 963 elements vertically, while a 1.85:1 flat widescreen image would use only 692 vertical elements. By using anamorphic optics with this ratio of about 1.07:1, a 4:3 ratio image can utilize the full 1024 element vertical resolution.

By desirable to use an anamorphic process to ratio of three's ratio axis while this ratio is by the benefits of higher image of higher ratio the aspect of a large number of anamorphic ratio. This is especially desirable for emerging video technologies where all available resolution. Accordingly, there is a need for an anamorphic with a variable anamorphic ratio for use in particular image with aspect ratios that 4:3 ratio ratio of the image area to the recording or lens.

## SUMMARY OF THE INVENTION

Optical lens assemblies to be used in conjunction with video. The assembly provides a variable ratio. The lens assembly comprises a first lens group having negative refractive power in the x and y axes and a second lens group having positive refractive power in the x and y axes. The second lens group is placed between the first lens group and the third lens group. The second lens group and the third lens group are fixed relative to each other. The first lens group and the third lens group are fixed relative to each other. The first lens group and the third lens group are fixed relative to each other. The first lens group and the third lens group are fixed relative to each other.

## DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic view of a camera or projector lens assembly in the present invention.

FIG. 2 is a perspective view of the lens assembly in the present invention.

FIG. 3 is a plan view of the lens assembly in the present invention.

FIG. 4 is a plan view of the lens assembly in the present invention.

FIG. 5 is a plan view of the lens assembly in the present invention.

FIG. 6 is a plan view of the lens assembly in the present invention.

FIG. 7 is a plan view of the lens assembly in the present invention.

FIG. 8 is a plan view of the lens assembly in the present invention.

FIG. 9 is a plan view of the lens assembly in the present invention.

FIG. 10 is a plan view of the lens assembly in the present invention.

FIG. 11 is a plan view of the lens assembly in the present invention.

FIG. 12 is a plan view of the lens assembly in the present invention.

FIG. 13 is a plan view of the lens assembly in the present invention.

FIG. 14 is a plan view of the lens assembly in the present invention.

FIG. 15 is a plan view of the lens assembly in the present invention.

FIG. 16 is a plan view of the lens assembly in the present invention.

FIG. 17 is a plan view of the lens assembly in the present invention.

FIG. 18 is a plan view of the lens assembly in the present invention.

FIG. 19 is a plan view of the lens assembly in the present invention.

FIG. 20 is a plan view of the lens assembly in the present invention.

FIG. 21 is a plan view of the lens assembly in the present invention.

FIG. 22 is a plan view of the lens assembly in the present invention.

FIG. 23 is a plan view of the lens assembly in the present invention.

FIG. 24 is a plan view of the lens assembly in the present invention.

FIG. 25 is a plan view of the lens assembly in the present invention.

FIG. 26 is a plan view of the lens assembly in the present invention.

FIG. 27 is a plan view of the lens assembly in the present invention.

FIG. 28 is a plan view of the lens assembly in the present invention.

FIG. 29 is a plan view of the lens assembly in the present invention.

FIG. 30 is a plan view of the lens assembly in the present invention.

FIG. 31 is a plan view of the lens assembly in the present invention.

FIG. 32 is a plan view of the lens assembly in the present invention.

FIG. 33 is a plan view of the lens assembly in the present invention.

FIG. 34 is a plan view of the lens assembly in the present invention.

FIG. 35 is a plan view of the lens assembly in the present invention.

FIG. 36 is a plan view of the lens assembly in the present invention.

FIG. 37 is a plan view of the lens assembly in the present invention.

FIG. 38 is a plan view of the lens assembly in the present invention.

FIG. 39 is a plan view of the lens assembly in the present invention.

FIG. 40 is a plan view of the lens assembly in the present invention.

FIG. 41 is a plan view of the lens assembly in the present invention.

FIG. 42 is a plan view of the lens assembly in the present invention.

FIG. 43 is a plan view of the lens assembly in the present invention.

FIG. 44 is a plan view of the lens assembly in the present invention.

FIG. 45 is a plan view of the lens assembly in the present invention.

FIG. 46 is a plan view of the lens assembly in the present invention.

FIG. 47 is a plan view of the lens assembly in the present invention.

FIG. 48 is a plan view of the lens assembly in the present invention.

FIG. 49 is a plan view of the lens assembly in the present invention.

FIG. 50 is a plan view of the lens assembly in the present invention.

FIG. 51 is a plan view of the lens assembly in the present invention.

FIG. 52 is a plan view of the lens assembly in the present invention.

FIG. 53 is a plan view of the lens assembly in the present invention.

FIG. 54 is a plan view of the lens assembly in the present invention.

FIG. 55 is a plan view of the lens assembly in the present invention.

FIG. 56 is a plan view of the lens assembly in the present invention.

FIG. 57 is a plan view of the lens assembly in the present invention.

FIG. 58 is a plan view of the lens assembly in the present invention.

FIG. 59 is a plan view of the lens assembly in the present invention.

FIG. 60 is a plan view of the lens assembly in the present invention.

FIG. 61 is a plan view of the lens assembly in the present invention.

FIG. 62 is a plan view of the lens assembly in the present invention.

FIG. 63 is a plan view of the lens assembly in the present invention.

FIG. 64 is a plan view of the lens assembly in the present invention.

FIG. 65 is a plan view of the lens assembly in the present invention.

FIG. 66 is a plan view of the lens assembly in the present invention.

FIG. 67 is a plan view of the lens assembly in the present invention.

FIG. 68 is a plan view of the lens assembly in the present invention.

US-PAT-NO: 6549215

DOCUMENT-IDENTIFIER: US 6549215 B2

TITLE: System and method for displaying images using  
video

----- KWIC -----

## Detailed Description Text - DETX (56):

Referring now to FIG. 19, foveal and anamorphic video are combined in a single image. The low and high resolution images are combined as described above. The high resolution image is in region 452 using foveal video and also at a 1.times. scale in both the horizontal and vertical dimensions, using anamorphic video. To combine this region 452 with the low resolution regions 454, 456 in the horizontal dimension, the edges 458, 460 of the high resolution region are displayed at same scale as the high resolution region 452. The low resolution image information between the edges 458, 460 is displayed at same scale as the high resolution region 452. The information in the low resolution regions 464, 466 that is outside the high resolution region 452 is displayed using either abrupt or graduated anamorphic video.

Details Text Image HTML KWIC

17 US 6585378 B2

18 US 6574050 B1

19 US 6549215 B2

20 US 6520643 B1

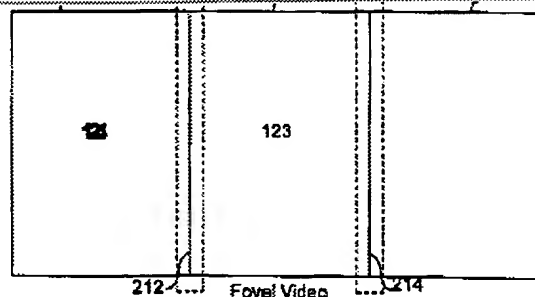


FIG. 8A

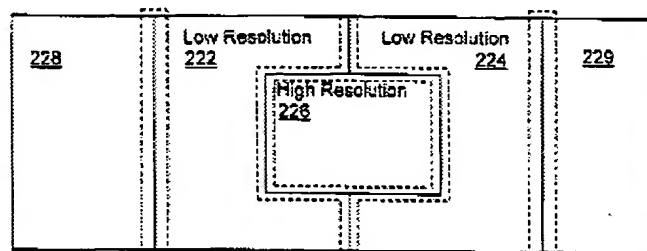


FIG. 8B

